

Claims

- [c1] 1. A flexible printed circuit board unit comprising:
a flexible electrically-isolator sheet;
a thermal component mounted on a front surface of the electrically-isolator sheet within a first specific area;
a thermally-conductive material located on a back surface of the electrically-isolator sheet on the back of the first specific area;
an electrically-conductive material located on the front surface of the electrically-isolator sheet within a second specific area, said electrically-conductive material designed to receive a solder material; and
a thermally-insulating material located on the back surface of the electrically-isolator sheet on the back of the second specific area, said thermally-insulating material having a thermal conductivity smaller than that of the thermally-conductive material.
- [c2] 2. The flexible printed circuit board unit according to claim 1, wherein the back surface of the electrically-isolator sheet is received on a front surface of the thermally-conductive material and a front surface of the thermally-insulating material, the front surface of the thermally-

conductive material being aligned within a plane with the front surface of the thermally-insulating material.

[c3] 3. The flexible printed circuit board unit according to claim 2, further comprising a thermally-conductive plate designed to receive the thermally-conductive material and the thermally-insulating material.

[c4] 4. The flexible printed circuit board unit according to claim 2, wherein a depression is defined in the thermally-conductive material, the depression designed to receive the thermally-insulating material.

[c5] 5. The flexible printed circuit board unit according to claim 4, wherein the thermally-conductive material is made of a plate having a constant thickness.

[c6] 6. A recording disk drive comprising:
a flexible electrically-isolator sheet;
a thermal component mounted on a front surface of the electrically-isolator sheet within a first specific area;
a thermally-conductive material located on a back surface of the electrically-isolator sheet on the back of the first specific area;
an electrically-conductive material located on the front surface of the electrically-isolator sheet within a second specific area, said electrically-conductive material de-

signed to receive a solder material;
a thermally-insulating material located on the back surface of the electrically-isolator sheet on the back of the second specific area, said thermally-insulating material having a thermal conductivity smaller than that of the thermally-conductive material; and
a thermally-conductive plate designed to receive the thermally-conductive material and the thermally-insulating material.

[c7] 7. A recording disk drive comprising:
an actuator block defining a first flat surface and a second flat surface having a level lower than the first flat surface;
a thermally-conductive plate having a first area received on the first flat surface and a second area received on the second flat surface;
a thermally-insulating material received on the second area of the thermally-conductive plate, said thermally-insulating material having a thermal conductivity smaller than that of the thermally-conductive plate; and
a flexible printed circuit board received flush continuously on the thermally-insulating material and the thermally-conductive plate.

[c8] 8. The recording disk drive according to claim 7, wherein a preamplifier IC is mounted on a surface of the flexible

printed circuit board over the first area of the thermally-conductive plate.

- [c9] 9. The recording disk drive according to claim 8, wherein an electrically-conductive material is located on the surface of the flexible printed circuit board over the second area of the thermally-conductive plate, said electrically-conductive material designed to receive a solder material.